

EXHIBIT 2

AGRICULTURAL ALTERNATIVE OPTIONS

On November 19, 2018, the Central Coast Regional Water Quality Control Board (Central Coast Water Board) issued a Notice of Written Public Comment Period for Ag Order 4.0 Conceptual Regulatory Requirement Options (Notice). In the Notice, the Central Coast Water Board invited stakeholders to provide comments and propose alternatives. Accordingly, the Grower-Shipper Association of Central California, Grower-Shipper of Santa Barbara and San Luis Obispo Counties, Monterey County Farm Bureau, California Farm Bureau Federation, Central Coast Groundwater Coalition, and Western Growers Association (collectively referred to hereafter as “we”) have compiled a complete packet of comments, proposed alternatives, technical justifications and supporting rationale. This attachment, Exhibit 2, specifically provides Agriculture (Ag) Alternative Options, and provides the technical justification and supporting rationale for such alternatives. To avoid confusion between the recommendations contained within the Ag Alternative Tables, and the Central Coast Water Board staff’s proposals in the Requirements Options Tables, we will refer to our ag alternatives generally as the Ag Alternatives and the Central Coast Water Board conceptual proposals as the Options Tables.”¹

Exhibit 2 includes six (6) separate Ag Alternative Tables (Attachment 1 to Exhibit 2) for the following six program elements:

- Surface Water
- Nitrates in Groundwater
- Sediment & Erosion
- Riparian
- Education & Outreach
- Groundwater Trend Monitoring.

For each program area (where applicable), we have identified the actions/requirements that we propose to be imposed on enrollees; actions and responsibilities to be imposed on the Central Coast Water Board; responsibilities that an Ag Third Party would undertake to assist in program implementation (the role of this third party will be explained further below); quantifiable milestones and time schedule provisions; monitoring; and reporting to the Central Coast Water Board from enrollees. All of these actions/requirements/responsibilities, etc. are summarized in the Ag Alternative Tables one (1) through six (6), which are attached to this Exhibit 2, as attachments 1 through 6. A narrative explanation of each program element is described further below in section II.

¹ These Ag Alternatives are proposed by these organizations collectively, but are not necessarily the exclusive opinion of any of the individual organizations. We anticipate that other ideas and/or proposals may be put forward by agriculture, and that each organization here will consider other proposals on their individual merit.

In section I, we provide a summary overview of key issues or components that apply generally to all program elements.

I. OVERVIEW

A. Ag Order 4.0 Needs to Be Adopted as a General Waste Discharge Requirements (WDRs) Order Pursuant to Water Code Section 13263

As a preliminary matter, we recommend that Ag Order 4.0 be adopted as a General Order pursuant to Water Code section 13263(i). Discharges from irrigated agriculture in the Central Coast clearly meet the criteria set forth in the section 13263(i), which require the category of discharges to meet the following: “(1) The discharges are produced by the same or similar operations. (2) The discharges involve the same or similar types of waste. (3) The discharges require the same or similar treatment standards. (4) The discharges are more appropriately regulated under general discharge requirements than individual discharge requirements.” (Wat. Code, § 13263(i).) Further, the time has come for the Central Coast Water Board to transition the irrigated lands regulatory program from an interim approach adopted under the conditional waiver provisions of Water Code section 13269, to a long-term approach adopted under Water Code section 13263. Unlike a conditional waiver, a General Order is not subject to a strict five year term. Rather, WDRs are required to be reviewed periodically. (Wat. Code, § 13263(d).) This provides the Central Coast Water Board with greater discretion to determine the timing of reviewing and updating requirements contained in the General Order.

Moreover, the multiple provisions that are anticipated to be in Ag Order 4.0 (many of which currently exist in Ag Order 3.0) are complex, will need to incorporate time schedules for implementation, and fit better as part of a General Order versus a “conditional waiver.” Notably, the term “conditional waiver” has suggested to many critics that irrigated agriculture is not being regulated as intensely as other dischargers. This is an incorrect characterization legally as well as practically. The requirements in Ag Order 3.0 (and previous versions) are essentially the same requirements that would have been in a General WDR had the Central Coast Water Board adopted such an order previously. To avoid unnecessary and misdirected criticism, we believe it appropriate at this time to move the Central Coast irrigated lands program from being a “conditional waiver” to being a General WDR Order.

B. Ag Order 4.0 Needs to Be Grounded on the Implementation of Management Practices

We understand that Central Coast Water Board has an obligation to adopt a WDR that is consistent with all applicable state laws and policies, including the Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Policy). We provide extensive comments regarding such laws and policies as they apply to Ag Order 4.0 in Exhibit 1, and we endeavor to not repeat such comments here. With that said, however, it is important to understand the practical realities of irrigated agriculture and its ability to comply with water quality standards. Agriculture is not like a typical point source facility that can build a treatment unit, treat wastewater, and then discharge from a

single location the treated effluent. Discharge of irrigation water and stormwater from agricultural fields are diffuse, and much is still unknown regarding the efficacy of various management practices and the ability to meet certain water quality objectives. As such, Ag Order 4.0 needs to be grounded in reasonable requirements and actions associated with the implementation of management practices to protect water quality.

Clearly, there needs to be an overlay of quantifiable milestones and time schedules for meeting applicable water quality objectives, as directed by the court in *Monterey Coastkeeper v. State Water Board*. (See *Monterey Coastkeeper v. State Water Resources Control Bd.* (2018) 28 Cal.App.5th 342 (*Monterey Coastkeeper*)). However, the Central Coast Water Board has considerable discretion to determine what is an appropriate milestone and time schedule, and meeting water quality objectives does not need to occur within the lifespan of the permitted action. Further, nothing within the court's decision states that the Central Coast Water Board should abandon the principles set forth in the NPS Policy, which is to understand that "... the most successful control of nonpoint sources is achieved by prevention or by minimizing the generation of NPS discharges." (NPS Policy, at p. 7.) And that, "[m]ost NPS management programs typically depend, at least in part, upon discharger implementation of management practices (MPs) to control nonpoint sources of pollution." (NPS Policy, at p. 8.)

Accordingly, with these Ag Alternatives we provide an appropriate balance between a program that seeks to have irrigated agriculture implement reasonable and practicable management practices for the protection of water quality (to the extent that such practices are known), and a program that includes reasonable and appropriate quantifiable milestones and time schedules.

C. Ag Order 4.0 Needs to Incorporate Phases, Prioritize Watersheds and Include Incentives For Implementing Protective Practices

In the Notice, the question is specifically asked if all farming operations should be treated the same in terms of requirements and the implementation timing for these requirements, and specific recommendations are requested with respect to phasing and/or prioritization. Our unequivocal answer to this question is NO. More specifically, the Ag Alternatives respond to these questions by specifically calling out the program elements that should be implemented based on prioritization criteria, and requirements that should be phased in over time. Both approaches are necessary to ensure orderly implementation of Ag Order 4.0, and to balance available resources against the most urgent water quality issues.

Notably, the State Water Board's Order WQ 2018-0002, *In the Matter of the Review of Waste Discharge Requirements General Order No. R5-2012-0116 for Growers within the Eastern San Joaquin River Watershed that are Members of the Third-Party Group* (ESJ Order) included instruction (and discretion) to all regional boards regarding implementation of the nitrogen management plan provisions contained therein. The State Water Board recognized categories of uniquely-situated growers for which these requirements may not be applicable, and other categories for which the requirements should be limited or additional time provided. (See ESJ Order, pp. 34-35.) For non-nitrogen management plan provisions,

prioritizing and phasing is equally important for the reasons already stated. Moreover, the court's decision in *Monterey Coastkeeper* does not prohibit the use of phased and prioritized approaches, and in fact, such approaches are consistent with having milestones and time schedules.

Equally important is the need to include incentives to growers for implementing protective management practices, and conversely, disincentives for growers that choose not to implement protective practices. In general, a relatively easy incentive/disincentive is to alter reporting frequencies for enrollees based on the management practices being implemented at a farm/ranch. This can be achieved by decreasing reporting frequencies for those that score high on implementing protective practices while requiring those with low scores to identify and implement follow-up actions. This is explained further in our Surface Water Program Element.

Ultimately, the success of Ag Order 4.0 will depend on the Central Coast Water Board and agriculture's ability to focus on the implementation of reasonable and practicable management practices (to the extent they are known and identified) in priority areas. The general application of all requirements, at one time, to all growers equally may generate reams of data but that data will not be useful to the Central Coast Water Board and will not in itself improve water quality. We believe that the rationale, reasonable approach we provide in the Ag Alternatives is far more likely to help move us towards improved water quality conditions.

D. Ag Order 4.0 Needs to Identify Regional Board Responsibilities and Actions

Notably, a key component for Ag Order 4.0 to be successful will be the Central Coast Water Board's role for ensuring compliance and accountability by enrollees in the implementation of protective practices. For this program to meet our mutual goals of improving water quality, the Central Coast Water Board must effectively implement its responsibilities. Thus, for several program elements, we have identified specific responsibilities for the Central Coast Water Board. In large part, these responsibilities exist today but are not necessarily implemented systematically, or in a manner that ensures accountability for all enrollees.

For example, in the Surface Water program element, we specifically identify the need for the Central Coast Water Board to inspect enrollee operations within prioritized watersheds, and during such inspections the Central Coast Water Board should score operations relative to implementation of surface water management practices. Those operations with low scores (i.e., operations that fail to implement reasonable and practicable practices that are considered to minimize impacts to surface waters) would then be subject to further requirements, while those with high scores (i.e., implement reasonable and practicable practices that minimize impacts to surface waters) may receive the benefit of less reporting. Such an approach provides both incentives and disincentives to growers. More importantly, Central Coast Water Board inspections of at least a subset of operations are imperative to ensure accountability.

Further, throughout the Ag Alternatives, we identify a number of different reporting and planning templates that would be prepared by the Ag Third Party (discussed and explained in section I.E.) in the first instance that must then be approved by the Central Coast Water Board's executive officer. Considering the importance of these templates and the integral part that they play in the success of Ag Order 4.0, we recommend that the executive officer be required to act on these templates within 90 days of receipt from the Ag Third Party. As part of this process, we fully expect that within this 90-day period, the templates will be posted and provided to all stakeholders for at least 30 days for comment. The executive officer would then act after considering all comments. If the executive officer is unable to take approval action within 90 days, then we recommend that the templates go before the full Central Coast Water Board for approval at their next regularly scheduled meeting.

In the event that the executive officer approves or issues a template that is unsatisfactory to agriculture or any other stakeholder, then the stakeholder shall have the right to petition the executive officer's approval to the full Central Coast Water Board. However, the stakeholder shall have commented on the template during the comment period to ensure that they have exhausted their administrative remedies before the executive officer. In the event that a member of the public is not satisfied with a template as adopted by the full Central Coast Water Board, then the member of the public has the right to petition that action pursuant to Water Code section 13320.

E. Ag Order 4.0 Should Allow an Ag Third Party to Play a Limited Role in Assisting Growers in the Implementation of Some Components of the Order

Across the state, and within the Central Coast irrigated lands program, there has been much discussion and debate regarding the value of allowing Ag Third Party groups to assist in implementation of irrigated lands programs. The State Water Board has stated on several occasions that it recognizes the utility of and supports the use of Ag Third Party programs, and has made some accommodations for irrigated lands programs that utilize such entities in a comprehensive manner. (See, e.g., ESJ Order, p. 20.) Historically, the Central Coast Water Board has authorized the use of a third party for surface water monitoring and to assist in domestic well monitoring activities. For growers, there are many different opinions and viewpoints on the utility of a comprehensive third party with roles expanded beyond the current structure. For some growers, they see value in Ag Third Party programs if there is a true cost savings and other incentives, while others are skeptical and concerned that such programs might be improperly used by the Water Board to shift their enforcement responsibilities onto the third party. In light of all of these different views, we provide here Ag Alternatives that would allow the use of an Ag Third Party in a limited role. This approach is consistent with the State Water Board's direction in footnote 64 of the ESJ Order where the State Water Board stated, "[t]he Central Coast Water Board agricultural regulatory program for individual growers provides an option for groups to perform a limited set of functions for the growers, rather than the full set of functions contemplated by this order. We continue to allow for third parties in the Central Coast region to take on a limited set of functions in this manner." (ESJ Order, p. 21, footnote 64.)

First, we support the continued use of an agricultural third-party option for surface water monitoring as it exists within the existing Ag Order. Nothing within our comments here, or within our Ag Alternatives, is intended to depart from this existing surface water monitoring requirement, which gives enrollees the option to conduct surface water monitoring individually or participate in the region-wide monitoring program that is conducted by Preservation Inc.

Second, our use of the term “Agricultural Non-Profit Third-Party” is not intended to pre-judge the form or entity that would serve in this capacity. At this time, this role might be served by an existing entity, through a cooperative agreement amongst several existing entities, or through a new entity. Ultimately, it is our intent to avoid duplicative administrative costs associated with existing agricultural entities, and it is our hope that this option does not result in the creation of one more organization that an enrollee is mandated to join under the terms of Ag Order 4.0. Rather, we see this agricultural entity providing technical experience and expertise on certain specified deliverables within Ag Order 4.0.

Specifically, the limited functions that the agricultural third-party entity would undertake as proposed in these Ag Alternatives would be as follows: propose methodologies, prepare various report templates for review and approval by the Central Coast Water Board’s executive officer, identify areas in need of additional research, provide input to the Central Coast Water Board regarding Nitrogen (N) removal coefficients, and, at its discretion, offer education and outreach to growers.

Ultimately, we seek to have Ag Order 4.0 include provisions that allow for an Ag Third Party (referred to hereafter as Ag Third Party) to volunteer to take on certain specified responsibilities as identified in Ag Alternatives. If no such entity was to come forward that was satisfactory to the Central Coast Water Board’s executive officer, these responsibilities would then fall on the Central Coast Water Board directly.

II. SPECIFIC PROGRAM ELEMENTS

A. Surface Water

The Notice divides surface water issues into two separate program elements: Irrigation and Nutrient Management for Surface Water and Pesticide Management for Surface Water and Groundwater Protection. We disagree with this approach of dividing surface water-related issues into two separate program elements. Rather, we believe it more appropriate to combine the nutrient- and pesticide-related surface water quality issues into one program element. While the constituents of concern might be different, the same approach can be used to address both in Ag Order 4.0.

1. The Approach

Our Ag Alternatives approach for addressing agricultural discharges that may impact surface water quality entails the following steps.

First, the Ag Third Party would propose to the Central Coast Water Board a methodology for prioritizing watersheds and/or subwatersheds for application of the surface water program elements. In its methodology for prioritizing watersheds/subwatersheds, the Ag Third Party would look to incorporate consideration of hydrologic conditions in the different watersheds, the impacts of flow on water quality, and seasonality, and recommend that the Central Coast Water Board's process to prioritize waterbodies needs to be based on actual documented impairments that are supported with reputable data, which means that it has been collected pursuant to approved quality assurance and quality control (QA/QC) procedures. Prioritizing the watersheds/subwatersheds based on documented impairments for toxicity, sediment and nutrients is necessary because it is important to focus limited resources and attention on the most problematic surface water bodies. Factors in the prioritization methodology would include, but are not limited to, identifying that irrigated agriculture is a known contributor to the impairment in question, and that the beneficial uses associated with the stated impairments (e.g., COLD aquatic life uses) are actual, existing beneficial uses and not just designated beneficial uses. The Central Coast Water Board would then use the proposed methodology and reputable data (e.g., CMP and CCAMP data) to actually prioritize watersheds/subwatersheds. In its proposed list of prioritized waterbodies, the Central Coast Water Board needs to factor and acknowledge when hydrologic conditions may be causing the impairment, and its proposed priorities must be supported with data that has been collected pursuant to approved QA/QC procedures. The priorities shall be reevaluated periodically but no later than once every five (5) years.

Second, the Ag Third Party would create a draft Surface Water Management Practice Summary Report template (Summary Report). The template would be submitted to the Central Coast Water Board and would be subject to executive officer or Central Coast Water Board approval according to the procedures described in section I.D. above. The template is to be used by farms/ranches in priority watersheds to identify and track their implementation of reasonable and practicable management practices that have the potential to improve surface water quality for some or all of the constituents of concern. Completed templates would be submitted to the Central Coast Water Board for farms/ranches in the identified priority watersheds/subwatersheds. Depending on the number of priority watersheds/subwatersheds, this requirement could also be phased and applied to farms/ranches over time.

In addition to completing a Summary Report, and submitting the Summary Report to the Central Coast Water Board, enrollees (or their authorized representatives) operating these farms/ranches would also be required to prepare and maintain on the farm a Surface Water Quality Discharge Management Plan (Management Plan) that would need to be available to Central Coast Water Board staff during an inspection. The Management Plan itself would be in a template form that is first developed by the Ag Third Party, and then subject to executive officer or Central Coast Water Board approval according to the procedures described in section I.D. above. The Summary Report and the Management Plan are designed to document and capture the management practices that are being implemented on the farms/ranches in these priority watersheds/subwatershed and do not substitute for the primary requirement, which is to implement reasonable and practicable management practices that are believed to be protective (based on best available research) of surface water quality from discharges of irrigation water. To clarify, we do not believe it appropriate for Ag Order 4.0 to

specifically state what management practices should be implemented, rather than implementation of reasonable and practicable practices is a requirement. This is consistent with existing Ag Order provisions and Porter-Cologne Water Quality Control Act. (See Exhibit 1, Section II.F.)

Third, and crucial to the success of this program element, is the need for Central Coast Water Board staff to inspect these farms/ranches in the identified priority watersheds/subwatersheds. The inspections should include a scoring process that can help to identify the farms/ranches that are implementing reasonable and practicable practices for their operation, and to identify those operations that are not. We intend for the Ag Third Party to determine an appropriate scoring mechanism for use by the Central Coast Water Board. Most importantly, those farms/ranches that receive low scores from the Central Coast Water Board must reevaluate their operation and consider the need to implement new and improved management practices, which would then need to be reflected in a revised Management Plan and Summary Report. The revised Summary Report would need to be submitted to the Central Coast Water Board within a specified number of months after Central Coast Water Board inspection.²

Upon further inspection, should the Central Coast Water Board staff find that the enrollee responsible for that farm/ranch has failed to update their Management Plan and submit a revised Summary Report, or has failed to implement changes identified on an updated Management Plan, then the Central Coast Water Board shall bring an enforcement action against the enrollee for that farm/ranch.

If, on the other hand, the enrollee for the farm/ranch in question has updated their Summary Report and Management Plan, and has in good faith attempted to implement changes, then an enforcement action should not be brought even if the farm/ranch continues to receive low scores. Rather, farms/ranches with hard-to-solve problems should be given time and opportunities to implement new or revised management practices to identify effective practices that address farm/ranch specific issues. This process is not intended to substitute for needing to ultimately meet receiving water limits, but provides for an approach for getting to compliance. If the farm/ranch score is not satisfactorily improved within three (3) years, then the Central Coast Water Board should use its authority under Water Code section 13267 to order development and submittal of a technical or monitoring program report that applies to that farm/ranch. In this case, the technical or monitoring program report would need to be prepared or certified by a qualified professional and would need to include recommendations for controlling discharges from this farm/ranch that may cause or contribution to violations of receiving water limits.

Another crucial element is the need for direct education and outreach to enrollees with farms/ranches in the prioritized areas. Prior to, and concurrent with, the inspection process,

² At this time, we do not recommend the number of months for when a revised Summary Report should be submitted. Rather, we believe that growers should be given a reasonable amount of time to re-evaluate their operation, consult with technical experts as they determine appropriate, and then revise the Management Plan and submit a revised Summary Report.

the Central Coast Water Board staff needs to conduct education and outreach to enrollees with farms/ranches in these targeted areas to convey to them the importance of employing management practices that are believed to be protective.

2. Special Circumstances

The Ag Alternatives approach summarized above works well for the majority of irrigated acreage on the Central Coast. However, there are limited areas with tile drains that will need additional attention and time to develop solutions. By that we mean that the Central Coast Water Board needs to identify those tile drain areas and work with the third party to establish priorities and funding options for such areas. For these areas, the best approach for a regional solution may be a collective treatment systems. Because the tile drain areas have unique geographic and drainage, the system used should be based on studies or research on the specific drainages. Where collective treatment solutions have been employed, we recommend that enrollees with farms/ranches in these areas be allowed to submit a collective Summary Report for the area. Further, the inspection and scoring process for these areas should be specific to the collective treatment solution.

3. Monitoring and Reporting

We recommend that the surface water monitoring program remain relatively the same as it exists today. The coordinated surface monitoring program has now been implemented for over 13 years and thus has developed a comprehensive set of data for key waterbodies throughout the Central Coast. It continues to be the most appropriate monitoring approach for irrigated agricultural programs. The broad nature of the monitoring program ensures that all types of surface waters are monitored throughout the region, including those that would be considered high-quality waters under the state's anti-degradation policy, as well as those that are impaired. Neither the State Water Board nor the court in *Monterey Coastkeeper* have found such representative monitoring programs to be inconsistent with state law or policy. Moreover, neither have suggested that individual monitoring is effective in irrigated agricultural programs.

With respect to reporting components, reporting of water quality data collected pursuant to the coordinated monitoring program would remain the same. Additional reporting comes in the form of submittal of the Summary Report. In general, we propose that submittal of the Summary Report be required annually. However, as an incentive to operators, we recommend that those farms/ranches that receive high scores be subject to less frequent reporting (e.g., once every three years). Notably, Summary Reports as proposed in these Ag Alternatives would be submitted directly from the enrollee to the Central Coast Water Board, and thus would be a public record. Because the Ag Third Party in this Ag Alternatives plays a limited role, we recognize that it does not fall under the State Water Board's precedence for anonymity of data and information.

4. Quantifiable Milestones and Time Schedules

In the Ag Alternatives approach, we recommend several different milestones and time schedules. First, where this is a total maximum daily load (TMDL) that applies to a watershed/subwatershed and irrigated agriculture, and is in effect (i.e., adopted and approved by all required agencies), the targets and time schedules in the TMDL would be the applicable milestones and time schedules. Notably, our recommendation to use adopted TMDL targets and time schedules here does not mean that we agree and support all provisions within the various TMDLs. Some of the TMDLs have unrealistic load allocations and time schedules as they apply to agriculture. To the extent that some of the TMDLs include problematic provisions, we reserve our right to challenge such provisions in appropriate proceedings and reserve our right to advocate for changes to TMDLs with problematic provisions.

In addition to TMDL targets (where applicable), quantifiable milestones would include decreasing the percentage of farms/ranches with low scores, having certain percentages of farms/ranches implement and/or install management practices that prevent irrigation flow from leaving a farm/ranch within so many years of order adoption (this could be phased), and have priority watersheds that are primarily impacted by agricultural discharges demonstrate water quality improvements over time (which may be shown either through decreases in concentrations of specific constituents or through decreased loads of pollutants).³

Other quantifiable milestones include identification of collective and off-stream treatment system options for tile drain areas, the offering and completion of education hours, and the need for evaluation of some beneficial uses in certain watersheds/subwatershed where such uses are likely inappropriate and not attainable.

With respect to time schedules for meeting water quality objectives (which need to be expressed exclusively as time schedules for meeting various receiving water limits), we provide no specific recommendations at this time. Rather, we believe that by meeting the quantifiable milestones expressed in the Ag Alternatives surface water program element, contributions of constituents from discharges of irrigation water will decrease dramatically and will ultimately result in compliance with receiving water limits as applicable to agriculture.

5. Incentives

With this Ag Alternatives approach, we also incorporate a number of incentives that are designed to encourage improvements to water quality through implementation of on farm/ranch practices. These incentives are as follows:

³ Notably, surface water quality may be impacted by many different sources. Thus, it is difficult to set milestones that apply directly to surface water quality improvements unless contributions of constituents of concern in that waterbody are primarily from irrigated agricultural activities. Accordingly, the quantifiable milestones provided here are focused mainly on controlling irrigation flow to surface water bodies, which greatly decreases pollutant loads from irrigated agriculture.

- Allow enrollees to hire a qualified professional to score and certify the farm/ranch and the implementation of protective practices as identified on the Management Plan. The certification from the professional would then be submitted to the Central Coast Water Board. The Central Coast Water Board would then have the option to not specifically inspect that particular farm/ranch based on the certified score received but rather rely on the score to determine further requirements applicable to the farm/ranch in question. A qualified professional must have one of the following registrations or certifications along with appropriate experience with issues on irrigated agricultural lands: registered professional civil engineer, geologist, engineering geologist, or landscape architect; professional hydrologist; certified soil scientist; certified professional in erosion and sediment control; certified professional in storm water quality; a professional in erosion and sediment control; or, other professionals as approved by the Central Coast Water Board.
- Farms/ranches that receive high scores should be subject to less frequent reporting.
- Farms/ranches that are part of a collective treatment program for addressing surface water impairments may submit a collective Summary Report, and once approved, be exempt from annual Summary Reporting for those farm/ranches.
- Enrollees with farms/ranches that are participating in a certification program that specifically addresses surface water quality impairments may meet the Summary Report requirement through the submittal of a collective Summary Report by the certification program in question. Once the certification program is approved by the Central Coast Water Board executive officer, farms/ranches in the certification program would be exempt from annual Summary Reporting requirements. One potential example of a qualifying certification program is the California Strawberry Commission program that is currently under development.
- Enrollees with farms/ranches that are participating in management practice effectiveness trials or applicable innovation trials (that are associated with management practices for the protection of surface waters), may meet the Summary Report requirement through the submittal of a collective Summary Report. Once a trial program plan has been approved by the Central Coast Water Board's executive officer or the Central Coast Water Board pursuant to the template approval procedures spelled out in Section I.D. above, then farms/ranches participating in the trial would be exempt from annual Summary Reporting requirements for three years.

In summary, we propose a surface water program that focuses on watersheds/subwatersheds that have been prioritized based on actual impairments related to toxicity, sediment and/or nutrients, and where irrigated agriculture is a known contributor to these impairments. Farms/ranches in these priority watersheds/subwatersheds would be

required to provide management practice information to the Central Coast Water Board in a summary format, and would be required to prepare Surface Water Quality Discharge Management Plans. To ensure accountability, the Central Coast Water Board would at the very least randomly inspect a subset of the farms/ranches in the priority watersheds/subwatersheds, and would score the operations based on the implementation of reasonable and practicable management practices. Those with high scores would be subject to less frequent reporting while those with low scores would need to conduct follow-up actions. Quantifiable milestones are tied to scores from inspections, and the implementation/installation of management practices that are expected to prevent irrigation return flows from leaving the farm/ranch. Tile drains are unique and would be subject to slightly different requirements and time schedules.

B. Nitrates in Groundwater

The Ag Alternatives for nitrates in groundwater are consistent with the nitrogen management provisions set forth in the ESJ Order. We include requirements for an irrigation and nitrogen management plan (INMP), INMP Summary Report, development of crop coefficients, and propose an interim reporting requirement until crop coefficients for most Central Coast crops have been developed and accepted. We identify the actions and responsibilities that need to be undertaken by the Central Coast Water Board, and limited functions for an Ag Third Party of the type that we have included in our recommendations.

1. The Approach

First, we recommend that all farms in the Central Coast region begin reporting total nitrogen applied on the existing Total Nitrogen Applied (TNA) form, starting in 2021 (assuming adoption in March 2020). Specifically, TNA reporting for the 2020 calendar year would be due to the Central Coast Water Board by April 1, 2021. The 2021 report would be for the previous calendar year, and TNA reporting would be required annually by April 1 of the subsequent year until crop Nitrogen (N) removal coefficients (removal coefficients) for 95 percent of Central Coast crops by acreage⁴ are developed and approved pursuant to the process established in the ESJ Order, which is Central Coast Water Board and State Water Board approval.⁵ In the meantime, the Ag Third Party would develop Central Coast-specific INMP and INMP Summary Report templates for review and approval by the Central Coast Water Board's executive officer.

The continued use of TNA reporting during this interim period is appropriate because (1) it is familiar to Central Coast Water Board staff, approximately 1/5th of the growers on the Central Coast, and agricultural consultants that serve growers within the Central Coast region, and (2) it can be used to determine outliers in the interim by using N applied data and comparing it to ranches growing the same or similar crop or crop types within the same

⁴ To determine what constitutes 95 percent of total crop acreage, we recommend that the average of crop acres as reported on the County Crop Reports for the years of 2012 through 2017 be used. Otherwise this becomes a constantly moving target.

⁵ The TNA reporting requirement as referred to here is for ongoing operations. Reporting for operations that are terminating coverage shall be subject to reporting requirements that are specific to such events.

township or similar geographic region. So that the TNA data reported to the Central Coast Water Board is meaningful, we recommend that each ranch report annually (1) the total amount (measured or estimated) of irrigation water applied, (2) total N applied through fertilizers and compost to that ranch, and (3) N applied from irrigation water (i.e., N in the water itself not through fertigation).⁶ Optionally, enrollees may also report an estimate of the percentage of N in irrigation water that cannot be used for crop uptake, such as field preparation, pre-planting and germination. This method would be used by ranches with single crops, perennial crop and multi-crop rotations. When determining outliers based on N applied, the Central Coast Water Board should look only at N from fertilizers and/or organics/compost and not include N from irrigation water. This helps to incentivize use of high-N irrigation water.

Second, we recommend that the Central Coast Water Board staff use the TNA data to identify outliers after the first three years of reporting TNA data (i.e., after receiving TNA data for 2020, 2021 and 2022) under Ag Order 4.0. Identification of such outliers should occur sometime in 2023, and should be based on comparing enrollee TNA data growing same or similar crops or crop types in the same township (or other geographically equivalent area). As directed by the State Water Board, the Central Coast Water Board in this case is then responsible to conduct follow up and training for those that are considered outliers. (ESJ Order, p. 53.)

Third, the preparation of certified⁷ INMPs and the submittal of INMP Summary Reports would start after removal coefficients for 95 percent of total crop acreage in the Central Coast have been developed, and after a Central Coast specific self-certification program for INMPs has been developed and is available to enrollees. The self-certification program should be developed by the California Department of Food and Agriculture (CDFA), through the Fertilizer Research and Education Program. In recognition of the limited number of specialists available in the Central Coast, and the overwhelming number of INMPs that may need to be certified, we further recommend that the INMP certification requirement be phased. Those immediately subject to the INMP certification requirement (upon development of 95 percent of removal coefficients) should be the outliers identified by the Central Coast Water Board from the TNA data. Then, three years (3) after availability of the self-certification program, all INMPs would be subject to certification.

Fourth, the Central Coast Water Board would be primarily responsible for development of removal coefficients within the Central Coast rather than an Ag Third Party.

⁶ For example, for a ranch with one well, N will be the average N in the irrigation water times the gallons or acre feet applied (as measured or estimated) for that year divided by the ranch acres. For ranches with multiple wells or other sources of irrigation water, N will be calculated using the weighted average of the N in the irrigation water (measured or estimated) and the average contribution of applied water per well or other source (measured or estimated), divided by the ranch acreage.

⁷ Certification of an INMP may be certified by a specialist such as a Professional Soil Scientist, Professional Agronomist, Certified Crop Adviser that has completed the required training, technical service providers certified in nutrient management in California by the National Resource Conservation Service (NRCS), certified agricultural irrigation management specialists certified by the Irrigation Association; or, self-certified by the enrollee that attends a CDFA or other executive officer approved training program for INMP certification.

As explained previously, the Ag Third Party referenced in this Ag Alternatives is intended to provide technical assistance for some specified activities and is not akin to or similar to the agricultural third parties in the Central Valley that serve a more robust role in implementing the irrigated lands program. Thus, it would be inappropriate for the Central Coast Water Board to require this group to develop removal coefficients in the first instance. Rather, we recommend that the Ag Third Party in this Alternatives provide input to the Central Coast Water Board regarding removal coefficients, and have the discretion to submit removal coefficients to the Central Coast Water Board for consideration. As directed in the ESJ Order, removal coefficients need to be approved by the Central Coast Water Board's executive officer in consultation with the State Water Board, following an opportunity for public review and comment. (ESJ Order, p. 42.)

We recommend that removal coefficients be developed for 95 percent of the Central Coast crops. Considering the vast number of crops on the Central Coast, this is a reasonable percentage as compared to the 99-percent value used in the ESJ Order for the Central Valley. Under the ESJ Order, the Central Coast Water Board has the discretion to set the appropriate number of crops or crop types to be analyzed and the time for development of coefficients. (ESJ Order, p. 42.)

Fifth, once 95 percent of the removal coefficients are available and INMP and INMP Summary Report templates are approved (which should occur concurrently during removal coefficient development), total applied (A) and total removed (R) would be reported annually on the INMP Summary Report to the Central Coast Water Board. For the INMP Summary Report, this would mean that total A and total R is summed for all crops grown on that ranch for the previous year. To determine total R, enrollees would use R for each crop-type – not for each planting or block. (See Attachment 2 to Exhibit 2, Central Coast Irrigated Lands Nitrogen Management Conceptual Model, submitted on October 8, 2018.) We recommend this approach because of the challenges associated with multiple rotations of different crops in the same location within a single year, unpredictable crop types, and rapidly shifting conditions due to market demands. Our approach is consistent with the ESJ Order, which specifically states that “[t]he regional water boards have the flexibility to develop alternative reporting areas for these types of growers, as long as the regional water board determines that the alternative reporting area provides meaningful data and balances the level of detail with the reporting burden similar to a field approach.” Here, our reporting area is by ranch, and the data is meaningful and similar to data reported annually for annual and perennial crops.

The INMP, which is to remain on the farm and available for review by the Central Coast Water Board, should be a planning tool for each enrollee. It should identify proposed crop rotations (if applicable), and nitrogen management practices planned for management of the ranch over the next year. However, due to unknown changing market conditions, the INMP does not remain static each year, as enrollees need to adjust farming and crop decisions on an ongoing basis.

In summary, once removal coefficients are developed for 95 percent of the cropped acreage and a template has been approved, the INMP Summary Report would replace the TNA reporting. As with TNA reporting, the INMP Summary Report would be due to the

Central Coast Water Board annually. We recommend that it be submitted by April 1 of each year for the previous calendar year.

Sixth, since the Central Coast does not have agricultural third parties that function as intermediaries, the Central Coast Water Board is tasked with establishing criteria/metrics for determining what constitutes an outlier for follow-up training and education. The Ag Third Party we propose may develop suggested metrics and criteria for outliers to the Central Coast Water Board and can assist the Water Board in education and outreach to those individuals. However, the responsibility falls on the Central Coast Water Board staff. Metrics used to identify outliers would be reviewed and updated periodically as needed (but no less than once every three years), and would be based on TNA and/or total A and R per ranch.

Moreover, to identify outliers, we recommend that the Central Coast Water Board prepare a comprehensive report once every three (3) years that aggregates TNA or INMP Summary Report data for ranches located within the same township, or other appropriate geographically-based area. This report will also be helpful in determining if milestones are being achieved.

2. Special Circumstances

Consistent with the ESJ Order, the Ag Order 4.0 needs to include provisions for categories of uniquely-situated crops that may be exempt from the nitrogen management requirements if they can make the demonstration that nitrogen applied to the fields does not percolate below the root zone in an amount that would impact groundwater and does not migrate to surface water through discharges, including drainage runoff, or sediment erosion.

3. Monitoring and Reporting

Monitoring would consist of the domestic well monitoring requirement that currently exists, with some modifications to make it consistent with the ESJ Order. Specifically, domestic well monitoring for wells that are located on enrolled parcels would be required to monitor annually except under the following conditions: (1) if nitrate as N is less than (<) 8 mg/L for three (3) years, then sampling frequency decreases to once every five (5) years; (2) if the well is taken out of service, then sampling may be discontinued; or, (3) if the well no longer provides drinking water, then sampling may be discontinued. Additionally, if the result is above the drinking water standard for nitrate, no further sample is required.⁸ All sampling results would be required to be uploaded into the GEOTRACKER database.

Monitoring would also consist of primary irrigation well sampling for nitrates once every three years. All such results would be required to be uploaded into the GEOTRACKER database.

As explained above, reporting would consist of annual TNA reporting starting April 1, 2021 for the 2020 crop year until 95 percent of removal coefficients are available for the total

⁸ The monitoring and reporting requirements identified here are not intended to replace the notification requirements as required by the precedential elements of the ESJ Order.

crop acreage in the Central Coast. (See footnote 5 above regarding calculation of total crop acreage.) Then, annual INMP Summary Reporting in the manner discussed above would be triggered. TNA and INMP Summary Reports would be submitted directly to the Central Coast Water Board, and as such would be considered public documents.

4. Quantifiable Milestones & Time Schedules

In the ESJ Order, the State Water Board discusses extensively the need for implementation of effective management practices, and that instituting effective management practices requires sufficient monitoring and reporting to determine if existing management practices are leading to compliance with water quality requirements. (ESJ Order, p. 19.) The ESJ Order also points out that the NPS Policy does NOT specify a particular level of granularity in monitoring and reporting and leaves significant discretion to the water boards. (ESJ Order, p. 19.) Associated with monitoring and reporting, and determining if effective management practices are being implemented, is the need for quantifiable milestones related directly to implementation of management practices.

A key management practice (and concurrently a key reporting component) in the ESJ Order is the development of an INMP Summary Report template, and submittal of total A and total R information from growers on the approved template. Accordingly, we propose quantifiable milestones for development of a Central Coast specific INMP Summary Report template, and submission of total A and total R from growers on the approved template form.

Another quantifiable milestone is a decrease in the number of outliers over time as identified by the Central Coast Water Board. This milestone helps to evaluate the effectiveness of the Central Coast Water Board's outreach and training efforts, which are required by the ESJ Order. Presumably, as the Water Board increases outreach and training, there will be less contribution of nitrate to groundwater from irrigated agriculture, which in time may improve groundwater quality conditions. (See, e.g., Attachment 3 to Exhibit 2, Technical Memorandum, Alta Irrigation District Management Zone: Aggressive Restoration Alternative Modeling Scenario Results (September 29, 2016), attached hereto as Attachment 2, which shows that actual groundwater quality improvements may take multiple decades to be realized, even with implementation of impractical restoration efforts.)

C. Sediment and Erosion

Separate from, but related to the Surface Water program element, are our recommendations with respect to Sediment and Erosion control. As a preliminary matter, which is discussed in greater detail in Exhibit 1, the proposed requirements on the Options Table 4 are unreasonable and improper. For example, the Options look to prohibit the discharge of sediment due to erosion events. It would also eliminate from Ag Order 4.0 coverage of certain types of cultivation on slopes that are greater than an undefined slope percentage. We fundamentally disagree with the approach proposed in Option Table 4. Rather, we propose an approach that is consistent with that in the ESJ Order. The State Water Board found the ESJ Order approach to be reasonable, which essentially incorporates a requirement to implement sediment and erosion control practices for growers that have the

potential to cause erosion and discharge sediment that may degrade surface waters. (ESJ Order, p. 32.) While the State Water Board indicated that regional water boards have discretion with respect to the documentation and reporting of such practices, the State Water Board found the Central Valley Water Board's approach to be reasonable and appropriate. Accordingly, we follow this approach.

1. The Approach

First, the Ag Third Party would develop a template for the Sediment and Erosion Plan, which would in the first instance be subject to Central Coast Water Board executive officer approval. As with all templates, and explained above, failure by the executive officer to approve the template in a timely manner would result in the Central Coast Water Board having approval authority. Approval by the executive officer could be petitioned to the full Central Coast Water Board, and approval by the full Central Coast Water Board could be petitioned pursuant to Water Code section 13320.

Second, using the approved template, farms/ranches meeting certain triggers would be required to have the Sediment and Erosion Control Plan prepared in one of the following ways:

- The Sediment and Erosion Control Plan must adhere to the site-specific recommendation from the NRCS, NRCS technical service provider, the University of California Cooperative Extension, the local Resource Conservation District; or conform to a local county ordinance applicable to erosion and sediment control on agricultural lands. The Member must retain written documentation of the site specific recommendation.
- The Sediment and Erosion Control Plan must be prepared and self-certified by the Member, who has completed a training program that the executive officer concurs provides necessary training for sediment and erosion control plan development;
- The Sediment and Erosion Control Plan must be written, amended, and certified by a Qualified Sediment and Erosion Control Plan Developer possessing one of the following registrations or certifications, and appropriate experience with erosion issues on irrigated agricultural lands: California registered professional civil engineer, geologist, engineering geologist, landscape architect; professional hydrologist registered through the American Institute of Hydrology; certified soil scientist registered through the American Society of Agronomy; Certified Professional in Erosion and Sediment Control (CPSEC)TM/Certified Professional in Storm Water Quality (CPSWQ)TM registered through Enviro Cert International, Inc.; professional in erosion and sediment control registered through the National Institute for Certification in Engineering Technologies (NICET); or,
- The Sediment and Erosion Control Plan must be prepared and certified in an alternative manner approved by the executive officer. Such approval will be provided based on the executive officer's determination that the alternative method for preparing the Sediment and Erosion Control Plan meets the objectives and requirements of this Order.

The plan shall be maintained and updated as conditions change. A copy of the Sediment and Erosion Control Plan would be maintained at the farming operations headquarters or primary place of business and would be available to the Central Coast Water Board upon request during an inspection.

Third, triggers for needing a Sediment and Erosion Control Plan would be established via methodologies developed by the Ag Third Party. Such triggers may include as follows:

(a) Slope Percentages

While slope is one of the factors that should be considered in determining if there is risk of erosion and sediment discharges to surface waters, other factors, such as whether a ranch has been graded, also influence risk in this regard. Generally, if there exists a local government requirement that suggests a specific slope percentage should apply, then the Central Coast Water Board should use that value for farms/ranches in that County as a trigger, regardless of whether it has impermeable plastic mulch or impermeable hoop houses.

Any future determination of a specific slope that triggers this requirement should also be based on sound science and data from reputable sources, and be based on methodologies recommended by the Ag Third Party.

(b) Other Factors Contributing to the Need for a Sediment and Erosion Control Plan

In addition to slope percentage as a potential factor, the Ag Third Party needs to consider the following factors in developing a methodology that triggers the need for a Sediment and Erosion Control Plan. First, the requirement would need to apply to farms/ranches that have storm or tailwater discharge.⁹ Second, the farm/ranch would need to meet at a minimum one of the following:

1. A threshold of one (1) acre of contiguous cultivated area on the ranch with a slope identified by the Ag Third Party as triggering this requirement, or
2. Use of impermeable plastic mulch or impermeable hoop houses present during the rainy season on a slope greater than a number as identified by the Ag Third Party as triggering this requirement.

Importantly, the Sediment and Erosion Control Plan requirement would only apply to those portions of a farm/ranch that trigger the need for such a plan.

Fourth, the Central Coast Water Board will need to notify enrollees if they are subject to the Sediment and Erosion Control plan requirement. We recommend that there be a

⁹ If the enrollee meets the other requirements (i.e., slope, and acreage minimum or impermeable structures), the need to prepare a Sediment and Erosion Control plan can be removed, as long as a Qualified Sediment and Erosion Control Plan Developer possessing one of the registrations or certifications described above certifies that the farm/ranch, or portion of the farm/ranch subject to the requirement, does not produce stormwater or tailwater that is discharged to a surface water. This certification must be submitted to the Central Coast Water Board.

process whereby an enrollee may petition the executive officer or the Central Coast Water Board if they believe that such an error has occurred.

Fifth, the Central Coast Water Board should conduct random inspections on at least a sub-set of those subject to this requirement to ensure accountability and compliance.

Sixth, the extent that there are gaps in information regarding sediment control and post-application pesticide management, the Central Coast Water Board should identify the research needs.

3. Special Circumstances

For farms/ranches that are located below the level of an adjacent surface water body, or if a hydraulic barrier is maintained by a public agency (e.g., levee or elevated roadway) and is located between an adjacent surface water body and the farm/ranch, the Sediment and Erosion Control plan does not apply.

4. Monitoring and Reporting

Monitoring for turbidity would continue as it currently exists under the surface water monitoring requirements. In other words, enrollees would be required to conduct individual surface water monitoring or join the cooperative surface water monitoring requirement. Other turbidity monitoring is conducted by CCAMP, county public works departments, and others. With respect to reporting, there are no specific reporting requirements associated with the Sediment and Erosion Control plan. Rather, the Surface Water Quality Management Practice Summary Report template would likely incorporate management practices related to sediment and erosion, and thus such practices would be captured on that Summary Report.

5. Quantifiable Milestones and Time Schedules

Quantifiable Milestones and timelines for this Alternative Options requirement are tied to development and approval of the Sediment and Erosion Control plan template, preparation/certification of the plan by those subject to the requirement, and inspection of such operations by the Central Coast Water Board within a reasonable time period. While we have not specified what would be expected to be a reasonable time period for inspections, we are open to suggestions by the Central Coast Water Board and others as to what would be considered reasonable.

D. Riparian

Fundamentally, we disagree with the Central Coast Water Board's authorities with respect to dictating certain requirements for riparian habitat to protect water quality. As is discussed in Exhibit 1, the Central Coast Water Board has authority over discharges of waste. Dictating buffer requirements and prohibiting removal of vegetative cover well exceeds water board authority in issuing discharge requirements and arguably dictates the manner of

compliance. As such, our Ag Alternatives for the riparian program element are limited, and defer primarily to other water board authorities.

1. The Approach

First, Ag Order 4.0 should only require enrollees to maintain existing habitat on a farm if the habitat qualifies as a wetland under the Clean Water Act. And even then, enrollees may remove such habitat if they comply with all applicable federal, state or local exemptions or approvals (e.g., obtain applicable dredge and fill permits). Further, Ag Order 4.0 should support and incentivize participation in approved watershed restoration programs like the Salinas River Management Program. When participating in such programs, removal of native and non-native vegetation should be allowed in accordance with program permits.

Second, Ag Order 4.0 needs to carefully balance the need between protecting food safety and maintaining riparian vegetation and/or vegetative buffer strips. As explained at length by the Food Safety panelists at the September 20-21, 2018 workshop on Ag Order 4.0, co-management for food safety and water quality needs to be incorporated into Ag Order 4.0. While the Leafy Green Marketing Act (LGMA) does not prescribe specific metrics with respect to vegetative buffers, it does require leafy green growers to implement metrics related to risk from animal activity near and within the fields. Vegetation can attract wildlife and animals of all types, including rodents, pigs, deer, coyotes, dogs and others. As a result, animals may enter a nearby field. Under the LGMA, growers are required to assess the risk of animal activity near and within all fields. An animal intrusion flow chart is used throughout the industry to conduct this assessment. Based on the flow chart, if there is presence of animal entry within the field, such as limited foot prints and/or defecation in one spot, this is considered a medium risk and can be mitigated by removing the feces from that one spot. However, if there are substantial foot prints within the field and/or defecation throughout, this would be considered a high risk. At that point, it may be necessary to avoid harvesting that field all together to protect food safety.

While we understand the value of vegetative areas in helping to prevent sediment from reaching surface water bodies, growers need flexibility to implement management practices that allow them to balance food safety and water quality. This may mean that growers find it appropriate to install different management practices to protect water ways from sediment and tailwater discharges rather than maintaining set vegetative buffers. Setting forth requirements in Ag Order 4.0 that prescribe set buffers eliminates this flexibility and directly puts growers in the position of deciding between food safety or water quality. Realistically, for the vegetable industry, food safety will typically come first because human health is the number one (1) priority.

Third, the program elements for Surface Water address the need to protect water quality from tailwater and runoff. Because that element is designed to address water quality through such practices, which for some growers may include the installation of vegetative buffers, it is unnecessary (and inappropriate) to include prescriptive buffer requirements separately.

In light of the overlay between the purposes and goals of the riparian elements in Option Table 5 and our surface water elements in the Ag Alternatives, it is unnecessary to identify specific milestones or time schedules here. Further, monitoring and reporting are addressed under the Surface Water program element Ag Alternative. Accordingly, other than in limited circumstances as identified above, the riparian program element should be deleted as a separate requirement for Ag Order 4.0.

E. Education & Outreach

The ESJ Order includes participation by growers in outreach activities as a precedential requirement for irrigated lands regulatory programs statewide. (ESJ Order, p. 28.) However, the ESJ Order provides regional water boards with discretion to determine the form and frequency of the outreach events, as long as they are designed to reach all enrollees. We strongly support the need for education and outreach to all enrollees, as we believe that this component is necessary for all of us to see successful implementation of Ag Order 4.0. Accordingly, we recommend the following approach for education and outreach.

1. The Approach

First, we recommend that there be a mandated requirement of ten (10) education/continuing education hours for all enrollees over a five- (5)-year period. At least two (2) of these hours would need to be completed within one (1) year of adoption of Ag Order 4.0. Further, eligible topics for the educational requirement need to be related to surface and groundwater quality issues, and management practices with potential to improve water quality.

Second, participation in the CDFA/FREP Central Coast specific course for self-certification of an INMP qualifies as meeting the mandated education requirement as long as the enrollee has passed the program. The self-certification program is based on a curriculum developed by the University of California and is a comprehensive course on nitrogen and irrigation management that reviews practices of protecting groundwater. Attendees are required to pass a test in order to self-certify the INMP for the land they own and/or operate. The curriculum would be available for review by the Central Coast Water Board.

Third, participation in mandated education can be met by participation by the enrollee, or an authorized representative of the enrollees. Further, educational seminars can (and should) offer remote or webinar participation options, which would allow enrollees (or their authorized representative) to meet the mandated hours through such opportunities.

Fourth, consistent with the State Water Board's direction in the ESJ Order, the Central Coast Water Board would need to conduct the education and/or approve educational opportunities that are offered by others. In the event that an outside organization (e.g., the Ag Third Party, University of California Cooperative Extension) seeks to provide the opportunity for an educational seminar (in person or through an electronic medium), the organization would submit an application to the Central Coast Water Board executive officer seeking

approval of the opportunity for meeting the mandatory educational requirement. The executive officer would need to reject the application within thirty (30) days of receipt. If no rejection is provided, then the organization can presume that the opportunity is deemed approved. Timeliness of the review/approval process for such opportunities is necessary so that educational opportunities can be made available to growers.

Fifth, the Central Coast Water Board is responsible for tracking enrollee compliance with the educational/outreach requirement, and for issuing notices to enrollees annually if they have failed to meet the requirement.

Sixth, an additional element of the educational/outreach program would be to work with CDFA and others to provide educational opportunities for Certified Crop Advisors (CCAs). While this would not be a requirement of Ag Order 4.0, it is essential to ensure that local, Central Coast CCAs be educated on the requirements contained in Ag Order 4.0 so that they can assist local enrollees in complying with the order requirements.

Seventh, the Ag Third Party would, at its discretion, have the opportunity to provide educational opportunities, and would assist enrollees in documenting participation at an event that is sponsored and held by the Ag Third Party.

2. Quantifiable Milestones and Time Schedules

Because success of Ag Order 4.0 is highly dependent on effective education and outreach, it is appropriate to include a quantifiable milestone associated completion of education requirements. We recommend that the first milestone be that within one (1) year of adoption 80 percent of all enrollees will complete two (2) hours of mandated education. The second milestone would be that within five (5) years of adoption, 95 percent of all enrollees will complete the mandated ten (10) hours of education.

3. Monitoring and Reporting

To ensure compliance with this requirement, enrollees will need to report and certify completion of educational requirements to the Central Coast Water Board annually.

F. Groundwater Trend Monitoring

Options Table 1 includes in both options 1 and 2 a proposed requirement for groundwater quality trend monitoring that would be conducted either individually or through a cooperative program. Considering the nature of trend monitoring, we believe it impractical to suggest that this could be implemented by an individual. Rather, we believe that a cooperative program of sorts that incorporates use of a monitoring network that is representative of the various groundwater basins/sub-basins and major crop acreages is more appropriate. Accordingly, we recommend the following approach.

First, the Ag Third Party would develop a methodology and a quality assurance project plan (QAPP) for a trend monitoring network that uses irrigation, domestic or existing

dedicated monitoring wells. In selecting the wells for the trend monitoring, wells would be selected to be representative of the various groundwater basins and sub-basins, and would also represent major crop acreages grown in the Central Coast.

Second, the Central Coast Water Board would review and approve of the methodology that is developed by the Ag Third Party. The approval process would match that as identified above in Section I.D. for templates.

Third, enrollees would be responsible for providing the Ag Third Party with irrigation and domestic well information so that the Ag Third Party could determine if the well was qualified (and appropriate) for the trend monitoring network. Such information may include screening intervals, well construction information, and location within the aquifer.

Fourth, data from the wells identified for the trend monitoring network would be analyzed and characterized by the Ag Third Party or the Central Coast Water Board once every five (5) years for the groundwater basins/sub-basins identified as being representative.

III. CONCLUSION

In summary, we provide the Ag Alternatives to replace the many concepts contained in the Options Tables. We recognize that outside of the Options Tables and the Ag Alternatives, there are many other provisions that will likely be part of Ag Order 4.0. We look forward to commenting on all other provisions, and providing alternatives to them as appropriate when the Central Coast Water Board releases a tentative order for public review and comment. Further, we will continue to discuss our Ag Alternatives between now and the March 21-22, 2019 hearing, and may offer additions and/or revisions to the Ag Alternatives contained herein at that time.